UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,717	04/09/2004	David R. Schwartz	SVL920030057US1	1510

24852	7590	10/05/2006

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EXAMINER
VAUTROT, DENNIS L

ART UNIT	PAPER NUMBER
2167	

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 April 2004*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *2/18/2005*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

Information Disclosure Statement

1.   The information disclosure statement (IDS) submitted on 18 February 2005 has

been received and entered into the record. Since the IDS complies with the provisions

of MPEP § 609, the references cited therein have been considered by the examiner.

See attached form PTO-1449.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

3.   Claims 1-3, 6-12, 15-21, and 24-27 are rejected under 35 U.S.C. 102(e) as being

anticipated by **Skopec et al.** (hereinafter **Skopec**, US 2004/0128299).

4.   Regarding claims 1, 10, and 19 **Skopec** discloses a method of, apparatus for,

and an article of manufacture comprising a computer program usable medium

embodying one or more instructions executable by a computer for performing a method

of accessing a dataset, the method comprising:

intercepting an open request to access a dataset, the open request being associated with a first data structure that specifies a first access method (See page 5, paragraph [0088] "b) the coordinating program 160 of Step a) sets up the proper operating system constructs to intercept the load utility calls to the operating system to open any of its input files." Setting up the proper o/s constructs is the same as specifying an access method.);

replacing the first data structure with a second data structure [real operating system calls] that specifies a second access method which is different from the first access method (See page 5, paragraph [0089] "c) upon interception of the operating system calls, the coordinating program 160 issues the real operating system call to open the files and then replaces the input routine provided by the operating system by a replacement input routine 34 that reads data from application memory 26.");

and accessing the dataset in accordance with the second access method [replacement input routine] of the second data structure (See page 5, paragraph [0090] "d) when the RDBMS's load utility 40 requests data from its input file(s), the replacement input routine 34 inserted by the coordinating program 160 gains control and transfers data from the application memory 26 to the buffers 172 allocated for the input files of the RDBMSs.")

5.   Regarding claim 2, 11, and 20, **Skopec** discloses the open request specifies that the dataset is to be opened for reading, and said accessing reads from the dataset in accordance with the second access method. (See page 5, paragraph [0084] "Replace

standard DCB read/write routine address with the generic replacement read/write

routine address.")

6.   Regarding claim 3, 12, and 21, **Skopec** discloses the open request that specifies

that the dataset is to be opened for writing, and said accessing writes to the dataset in

accordance with the second access method. (See page 5, paragraph [0084] "Replace

standard DCB read/write routine address with the generic replacement read/write

routine address.")

7.   Regarding claim 6, 16, and 25, **Skopec** discloses specifying an access interface

module [coordinating program] to access the dataset, wherein said accessing is

performed by the access interface module. (See page 5, paragraph [0087] "a) a

coordinating program 160 is run which is responsible for the coordination of transferring

data from the computer's main memory 26 (application memory) to the RDBMS's load

utility buffers 172.")

8.   Regarding claim 7, 15, and 24, **Skopec** discloses the first data structure is a first

data control block [standard DCB read routine], and the second data structure is a

second data control block [special replacement read routine]. (See page 4, paragraph

[0065] "...the program switches to the PSW key of the OPEN, issues the SVC 22 to

open the requested DCB (Data Control Block), then switches back to the PSW key 0."

and see paragraph [0077] "In step 154, the routine gets the address of a special

replacement read routine that replaces the standard DCB read routine and places it in

the location to be accessed by the LOAD utility.")

9.   Regarding claim 8, 17, and 26, **Skopec** discloses the second data structure

contains an address of a shadow access interface module, and said accessing also

invokes the shadow access interface module [replacement routine], the shadow access

interface module receiving the address of the second data structure (See page 4,

paragraph [0063] "This table 200 is an MVS device that tells the operating system

("OS") to bypass its own supervisor call routines and gives the operating system the

address of replacement routine 34, as generally shown in FIG. 4." and see paragraph

[0077] "In step 154, the routine gets the address of a special replacement read routine

that replaces the standard DCB read routine and places it in the location to be accessed

by the LOAD utility."), and

        invoking, by the shadow access interface module, a supported access module to

access the dataset in accordance with the second access method [its own routine]

(Step 144 turns SVC screening on, and in step 146 the routine exits. Therefore, DB2's

call to SVC 22 must be intercepted so the coordinating program 160 may execute its

own routine.")

10.   Regarding claims 9, 18, and 27, **Skopec** discloses qualifying the dataset to

determine whether the first data structure is to be replaced (See page 4, paragraph

[0064] "In step 122, the data area that represents SVC 22 (OPEN TYPE=J) in the

screening table 200 is changed to hex '00' to indicate to the OS that a normal SVC 22

should not be used." In other words, the first data structure is to be replaced.)

when the first data structure is to be replaced, issuing another dataset open

request to open the dataset using the second access method. (See page 4, paragraph

[0065] "Next, SVC screening is turned of, in step 136, because the Open Hook routine

132 needs to issue a "real" SVC 22 to open the requested files.")

11.   Claims 28 – 33 are rejected under 35 U.S.C. 102(e) as being anticipated by

Skopec.

12.   Regarding claim 28, **Skopec** discloses an article of manufacture comprising a

computer program usable medium embodying one or more instructions executable by a

computer for performing a method of accessing a dataset, the method comprising:

intercepting an open request to access a dataset (See page 5, paragraph [0088] "b) the

coordinating program 160 of Step a) sets up the proper operating system constructs to

intercept the load utility calls to the operating system to open any of its input files."); the

open request being associated with a first data control block that specifies an

unsupported access method for the dataset (See page 4, paragraph [0063] "This table

200 is an MVS device that tells the operating system ("OS") to bypass its own

supervisor call routines and gives the operating system the address of replacement

routine 34, as generally shown in FIG. 4." Here, the routines are replaced because the

access method would not work the same as the call to the tape.);

in response to said intercepting, invoking an open screen module (See page 4,

paragraph [0063] "Still referring to FIG. 5, step 110 calls a subroutine that sets up an

SVC screening table 200..."), the open screen module issuing a second open request

[SVC 22] to access the dataset using the supported access method specified in the

second data control block, and receive an address of a supported access module (See

page 4, paragraph [0065] "...the program switches to the PSW key of the OPEN, issues

the SVC 22 to open the requested DCB (Data Control Block), then switches back to the

PSW key 0." and see paragraph [0077] "In step 154, the routine gets the address of a

special replacement read routine that replaces the standard DCB read routine and

places it in the location to be accessed by the LOAD utility."), and said open screen

module replacing the first data control block with a second data control block that

specifies the supported access method which is different from the unsupported access

method (See paragraph [0077] "In step 154, the routine gets the address of a special

replacement read routine that replaces the standard DCB read routine and places it in

the location to be accessed by the LOAD utility."), the second data control block also

comprising an address of a shadow access interface module [coordinating program]

(See page 4, paragraph [0078] "Within the computer's main memory 26 is the

coordinating program 160 which controls the hook setup logic 162, SVC screening table

200, the open hook logic routines 164 as well as the replacement read routine 166...");

and

invoking the shadow access interface module, using the address of the

supported access module, in accordance with the second data control block (See page

5, paragraph [0087] "a) a coordinating program 160 is run which is responsible for the

coordination of transferring data from the computer's main memory 26 (application

memory) to the RDBMS's load utility buffers 172."), the shadow access interface

module invoking the supported access module using the address of the supported

access module [replacement], to access the dataset in accordance with the second

access method. (See page 5, paragraph [0083] "Replace standard DCB check routine

address with the replacement check routine address.")

13.   Regarding claim 29, **Skopec** discloses the open request specifies that the

dataset is to be opened for reading, and said accessing reads from the dataset in

accordance with the second access method. (See page 5, paragraph [0084] "Replace

standard DCB read/write routine address with the generic replacement read/write

routine address.")

14.   Regarding claim 30, **Skopec** discloses the open request specifies that the

dataset is to be opened for writing, and said accessing writes to the dataset in

accordance with the second access method. (See page 5, paragraph [0084] "Replace

standard DCB read/write routine address with the generic replacement read/write

routine address.")

15.   Regarding claim 31, **Skopec** discloses said method further comprising:

qualifying, by the open screen module, the dataset to determine whether the first data

control block is to be replaced. (See page 4, paragraph [0064] "In step 122, the data

area that represents SVC 22 (OPEN TYPE=J) in the screening table 200 is changed to

hex '00' to indicate to the OS that a normal SVC 22 should not be used." In other

words, the first data structure is to be replaced.)

16.   Regarding claim 32, **Skopec** discloses said qualifying further comprises:

determining whether the dataset is of a type that is not supported by the first access

method. (See page 4, paragraph [0063] "This table 200 is an MVS device that tells the

operating system ("OS") to bypass its own supervisor call routines and gives the

operating system the address of replacement routine 34, as generally shown in FIG. 4."

Here, the routines are replaced because the access method would not work the same

as the call to the tape, and thus would be unsupported.)

17.   Regarding claim 33, **Skopec** discloses intercepting a close request to close the

dataset; and executing a close screen module to close the dataset. (See page 4,

paragraph [0064] "After the SVC screening table 200 has been set up in step 110, the

program attaches to DB2 to perform LOAD in step 112. In step 114, the hook setup

routine 102 performs some cleanup, such as releasing storage and closing datasets,

and exits.)

Claim Rejections - 35 USC § 103

18.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

19.   Claims 4, 13, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Skopec** as applied to claim 1 above, and further in view of **Anglin et al.** (hereinafter **Anglin**, US 5,930,824).   **Skopec** discloses the first access method is a basic direct access method. (See page 3, paragraph [0030] "The external media is also known as a DASD (direct access storage device).") **Skopec** does not explicitly disclose the second access method is a sequential access method. However, **Anglin** discloses the second access method is a sequential access method. (See column 5, lines 20 – 24 "A file control and access module 24A perform the operating system's access methods. As is conventional, the file control access module 24A can perform a variety of access methods such as BSAM (Basic Sequential Access Method), and QSAM (Queued Sequential Access Method), (2) direct access methods.") It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of **Skopec** with that of **Anglin** because both references are referring to accessing data using different access methods and by including sequential access methods as disclosed in **Anglin**, the apparatus becomes more robust because way the data is stored will not keep the apparatus from being able to access it. **Anglin** points out that a variety of different access methods could be used. It is for this reason that one of ordinary skill in the art would have been motivated to include the second access method is a sequential access method.

20.   Claims 5, 14, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable

over **Skopec** as applied to claim 1 above, and further in view of **2.7.8 Extended Format**

Sequential Data Sets (hereinafter **2.7.8**). **Skopec** teaches a method substantially as

claimed. **Skopec** does not explicitly disclose the dataset is an extended format physical

sequential dataset. However, **2.7.8** discloses the dataset is an extended format

physical sequential dataset. (See page 1, paragraph [0004] "All sequential data sets

accessed through BSAM and QSAM access methods are eligible for conversion to

extended format data sets.") It would have been obvious to one with ordinary skill in the

art at the time of the invention to combine the teachings of **Skopec** with that of **2.7.8**

because both references deal with accessing data efficiently, and by including the

extended format physical sequential dataset as disclosed in **2.7.8**, the method becomes

significantly more time efficient with the possibility of striping that the extended format

provides for. It is for this reason that one of ordinary skill in the art would have been

motivated to include the dataset is an extended format physical sequential dataset.

21.   Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Skopec**

as applied to claim 28 above, and further in view of **Anglin**. **Skopec** discloses the

unsupported access method is a basic direct access method. (See page 3, paragraph

[0030] "The external media is also known as a DASD (direct access storage device).")

Skopec does not explicitly disclose the supported access method is a sequential

access method. However, **Anglin** discloses the supported access method is a

sequential access method. (See column 5, lines 20 – 24 "A file control and access

module 24A perform the operating system's access methods. As is conventional, the

file control access module 24A can perform a variety of access methods such as BSAM

(Basic Sequential Access Method), and QSAM (Queued Sequential Access Method),

(2) direct access methods.") It would have been obvious to one with ordinary skill in the

art at the time of the invention to combine the teachings of **Skopec** with that of **Anglin**

because both references are referring to accessing data using different access methods

and by including sequential access methods as disclosed in **Anglin**, the apparatus

becomes more robust because way the data is stored will not keep the apparatus from

being able to access it. **Anglin** points out that a variety of different access methods

could be used. It is for this reason that one of ordinary skill in the art would have been

motivated to include the supported access method is a sequential access method.

22.   Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Skopec**

as applied to claim 28 above, and further in view of **2.7.8**. **Skopec** teaches a method

substantially as claimed. **Skopec** does not explicitly disclose the dataset is an

extended format physical sequential dataset. However, **2.7.8** discloses the dataset is

an extended format physical sequential dataset. (See page 1, paragraph [0004] "All

sequential data sets accessed through BSAM and QSAM access methods are eligible

for conversion to extended format data sets.") It would have been obvious to one with

ordinary skill in the art at the time of the invention to combine the teachings of **Skopec**

with that of **2.7.8** because both references deal with accessing data efficiently, and by

including the extended format physical sequential dataset as disclosed in **2.7.8**, the

method becomes significantly more time efficient with the possibility of striping that the

extended format provides for. It is for this reason that one of ordinary skill in the art

would have been motivated to include the dataset is an extended format physical

sequential dataset.

Conclusion

23.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Liu (6,415,300) discloses a method for high-performance backup.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis L. Vautrot whose telephone number is 571-272-2184. The examiner can normally be reached on Monday-Friday 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dv
28 September 2006

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29 September 2006